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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,742	02/06/2002	Mark R. Hansen	077077-9141-00	2995

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EXAMINER

SAFAIPOUR, HOUSHANG

ART UNIT PAPER NUMBER

2622

DATE MAILED: 03/25/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/072,742

Applicant(s)

HANSEN ET AL.

Examiner

Houshang Safaipoor

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 29 December 2003.
- 2a) This action is **FINAL**.
- 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 - Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 - Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____.
 - 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

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DETAILED ACTION

Response to Arguments

Applicant's amendment filed on December 29, 2003, has been entered and made of record.

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5, 6, 9, 11, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Darel et al. (U.S. Patent No. 6,024,018)

Regarding claim 1, Darel et al. discloses a camera assembly of a printing press comprising:

a housing; an image sensor positioned within said housing and adapted to acquire images of a moving substrate of a printing press; a light source positioned within said housing; an optics assembly positioned within said housing; a microprocessor positioned within said housing; and image processing hardware positioned within said housing and adapted to analyze the acquired images of the substrate (figs. 1, 2 and 3, columns 5 and 6 through col. 7, line 23 and col. 14, line 41 through col. 15 line 16) .).

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Regarding claim 2, Darel et al. discloses the camera assembly of claim 1 wherein said image sensor is a CCD scanner (col. 6, lines 5-20).

Regarding claim 5, Darel et al. discloses the camera assembly of claim 1 wherein said optics assembly include a lens (fig. 3).

Regarding claim 6, Darel et al. discloses the camera assembly of claim 5 wherein said optics assembly includes at least one mirror (fig. 3).

Regarding claim 9, Darel et al. discloses the camera assembly of claim 1 and further including a communication interface (col. 4, lines 8-36).

Regarding claims 11 and 18, arguments analogous to those presented for claim 1 are applicable to claims 11 and 18.

Regarding claim 19, Darel et al. discloses the camera assembly of claim 18 wherein said housing has a width dimension of no more than four inches (fig. 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 7, 8, 10, 12, 13, 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darel et al. (U.S. Patent No. 6,024,018).

Regarding claim 3, Darel et al. does not explicitly disclose a camera assembly of claim 1

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wherein said image sensor is an area scanner. The use of area scanner is well known and routinely implemented in scanning art as admitted by the applicant (Page 6, line 3). Therefore it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to include the use of area scanner in Darel's system .

Regarding claim 7, Darel et al. does not explicitly disclose the camera assembly of claim 1 wherein said image processing hardware includes at least one FPGA. The use of FPGA is well known and routinely implemented in scanning art (Official Notice). Therefore it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to include the use of FPGA in Darel's system .

Regarding claim 8, although Darel et al. does not explicitly disclose the camera assembly of claim 1 and further including a power supply, power supply is the essential part of the assembly to provide power to the different instruments.

Regarding claims 10 and 15, arguments analogous to those presented for claims 1 and 7 are applicable to claims 10 and 15.

Regarding claims 12 and 13, arguments analogous to those presented for claims 1, 2 and 7 are applicable to claims 12 and 13.

Regarding claim 20, Darel et al. does not explicitly disclose a camera assembly to include at least one rib. Enclosures with ribs are well known and routinely implemented in scanning art (Official Notice). Therefore it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to include ribs in the enclosure assembly of Darel's apparatus to improve heat dissipation.

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Claims 4, 14, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darel et al. (U.S. Patent No. 6,024,018) and further in view of Sikes et al. (U.S. Patent No. 5,018,213).

Regarding claim 4, Darel et al. does not explicitly disclose the camera assembly of claim 1 wherein said light source is a strobe type light. Sikes et al. discloses such an apparatus (col. 3, lines 14-42). Therefore it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to include conventional strobe light source in Darel's apparatus to stop the motion of the moving web for inspection purposes.

Regarding claim 14, Darel et al. discloses a camera assembly comprising:
a housing; a camera positioned within said housing for acquiring images of the substrate;
a light source positioned within said housing; an optics assembly positioned within said housing (please refer to claim 1); and

Darel et al. discloses image processing hardware positioned within said housing for processing the acquired images (please refer to claim 1), however, does not explicitly disclose determining any color register error. Sikes et al. introduces such an apparatus (col. 4, line 59, through col. 5, line 20). Therefore it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to include automatic register control of Sikes in Darel's apparatus to adjust the web printing.

Regarding claims 16 and 17, arguments analogous to those presented for claim 14 is applicable to claims 16 and 17.

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Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Houshang Safaipour whose telephone number is (703)306-4037.

The examiner can normally be reached on Mon.-Thurs. from 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L Coles, Sr. can be reached on (703)305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Houshang Safaipour
Patent Examiner
Art Unit 2622
March 15, 2004


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